European Journal of Operational Research 43 (1989) 366–369
North-Holland

Keyword Index

Volumes 38–43 (1989)

Activity networks, 41(1)
Adviser, 41(101)
Agency, 40(169)
Aggregate production, 42(279)
Aggregation, 41(1), 43(263)
Agriculture, 40(70)
Air lift operation, 38(208)
Air transportation, 43(3)
Algorithm of Beale, 40(85)
Algorithms, 43(143), 43(225)
Allocation, 38(329)
Analytic hierarchy process (AHP), 43(317)
Analytical techniques, 38(290)
Approximations, 38(242)
Artificial intelligence, 39(119), 39(284), 41(290), 42(111), 43(3)
Asset and liability management, 41(302)
Assignment, 40(90)
Assignment problem, 38(70)
Assortment problem, 38(104)
Automated inspection, 41(64)
Automated system, 43(44)

Backlogs, 40(196)
Banking, 41(290), 41(302), 42(52)
Basic feasible solution, 40(322)
Batch arrival, 38(202)
Batch means, 43(206)
Batch-arrival queue, 38(44)
Bayesian decision analysis, 40(363)
Belief networks, 40(363)
Bicriteria assignment, 38(255)
Bidding, 42(1)
Bidding problems, 40(363)
Biological and economic (bioeconomic) modelling, 42(299)
Blending, 41(270)
Boltzmann machines, 39(79)
Bounding techniques, 39(96)
Brach and bound, 38(228), 38(238), 39(157), 39(325)
Bus driver scheduling, 39(213)
Buyer, 41(261)

Capacitated production planning, 41(181)
Capacity expansion, 43(292)
Center estimation, 41(64)
Centre, 38(94)
Certainty effect, 38(301)
Choice functions, 40(309)
Circuit board assembly, 41(218)
Classification, 43(119)
Closed-loop quality control, 42(88)
Column generation with ranking, 41(232)
Combat modeling, 38(178)
Combinatorial analysis, 40(70), 41(64), 43(313)
Combinatorial optimization, 38(27), 39(119), 39(79)
Communications, 40(99)
Compensatory operation, 43(263)
Competitive models, 39(231)
Complexity, 43(225), 43(313)
Compound Poisson process, 38(202)
Computational analysis, 38(94), 40(243), 42(243), 42(326), 42(39), 43(327)
Computational complexity, 40(186)
Computer algorithms, 43(34)
Computer science, 41(33)
Computer-aided diagnosis, 39(284)
Conditional independence, 40(363)
Condorcet point, 41(314)
Conflict resolution, 40(109)
Conjoint analysis, 40(186), 41(127)
Connectionist models, 39(79)
Constrained games, 40(299)
Continuous sampling plan, 42(88)
Contract, 40(155)
Control and influence network matrices, 43(284)
Control variables, 38(86), 40(352)
Control, 42(52), 43(3)
Convex programming, 41(73)
Coordination, 41(261)
Cost benefit analysis, 38(35)
Cost engineering, 41(1)
Cost minimisation, 42(178)
Cost/benefit analysis, 41(290)
Covariance function, 38(202)
Crew allocation, 38(208)
Cut equations, 38(184)

Data employment analysis, 40(299), 43(136)
Decentralization, 40(155)
Decision, 38(307), 38(329), 39(131), 39(254), 43(271)
Decision analysis, 39(254)
Decision criteria, 38(56)
Decision making, 38(301), 40(22)
Decision support system, 39(119), 43(13)
Decision theory, 38(318), 39(254), 43(271), 43(350)
Decomposition, 42(243)
Defence, 43(342)
Degree-constrained trees, 39(325)
Demand, 40(16), 41(174)
Dempster–Schafer theory, 40(377)
Depot location, 39(150)
Descriptive modelling, 43(174)
Design, 41(335)
Deterministic, 38(2)
Diagnostics, 38(35)
Directed graphs, 40(363)
Discipline, 42(268)
Discount, 38(329), 40(38)
Discrete optimization, 43(313)
Discretization pattern, 43(292)
Discriminant analysis, 41(240)
Distance, 42(254)
Distributed system, 43(225)
Distribution, 39(150), 42(39), 43(305)
Drillhole composition, 38(56)
Due date assignment, 38(156)
Dynamic program, 38(56)
Dynamic programming, 38(104), 38(238), 41(151), 42(243), 43(168), 43(292)

Economic design of quality control, 39(261)
Economic long wave, 42(279)
Economics, 38(329), 39(54), 40(43), 42(166)
Efficiency, 40(299)
Empirical performance, 40(186)
Empirical statistics, 40(155)
Enquiries, 40(196)
EOQ, 40(243), 43(168)
Epistemology, 42(268)
Equilibrium assignment, 43(34)
Equilibrium networks, 42(166)
Equipment, 40(43)
EU theory, 38(301)

Each keyword is followed by volume number and first page of the paper it refers to.

0377-2217/89/$3.50 © 1989, Elsevier Science Publishers B.V. (North-Holland)

Exact solution, 38(70)
Expectation, 38(307)
Expert system, 39(284)
Exponential servers, 41(157)

Facilities, 38(14), 40(155), 40(275), 43(78), 43(88)
Facility location, 41(314)
Feasible direction methods, 40(322)
Feed-mix, 41(270)
Filtered Poisson process, 38(202)
Finance, 39(40), 43(161), 43(350)
Finance optimization, 39(131)
Finite buffer, 38(44)
Fisheries management, 42(229)
Fixed charge problem, 42(305)
Flexible flowshop, 43(143)
Flexible manufacturing systems, 40(222), 41(222), 43(119), 42(22)
Flow shop, 38(228), 41(186)
Forecasting, 41(15), 42(129)
Forestry, 38(14)
Framing effect, 38(301)
Futures research, 38(350)
Fuzzy data, 40(389)
Fuzzy number, 39(54), 43(174)
Fuzzy sets, 40(135), 40(389), 41(321)

Games, 41(86), 42(1)
Gamma distributions, 43(174)
General transportation, 43(53)
Generalization, 41(224)
Generalized networks, 39(103), 43(65)
Generalized set covering, 39(213)
Generalized transportation, 39(332)
Genetic algorithms, 39(119)
Geometric programming, 39(174), 40(243), 42(254)
Geometric scales, 40(109)
Goal programming, 41(347)
Goals, 41(302)
Government, 38(369), 43(161)
Gradient methods, 42(203)
Grains, 41(44)
Graph model, 41(86)
Graphs, 40(90), 43(216), 43(225)

Hajj, 40(292)
Hausdorff measure, 39(293)
Health services, 41(23), 41(277)
Heuristic method, 40(32)
Heuristic search, 39(119)
Heuristics, 38(70), 38(104), 38(167), 38(213), 38(27), 39(213), 40(90), 40(186), 40(243), 41(127), 41(64), 41(186), 41(224), 42(305), 42(313), 42(39), 43(88), 43(231), 43(305)
Hierarchical production planning and control, 40(196)
Higher education, 38(358)
History, 38(113), 41(101)
Hooke and Jeeve's method, 43(34)
Hotelling models, 39(231)

Incomplete information, 43(350)
Industrial transport, 43(44)
Inequality relations, 41(210)
Infeasibility, 41(270)
Inference, 41(73)
Infinite server queue, 38(202)
Infinitesimal perturbation analysis, 42(213)
Influence diagrams, 40(363)
Information divergence, 42(254)
Information, 38(369), 39(254)
Input–output analysis, 39(54)
Inspection screening, 39(261)
Insurance, 41(151)
Integer goal programming, 41(23), 41(277)
Integer programming, 38(76), 39(157), 40(58), 40(90), 41(232), 43(197), 43(305)
Interactive method, 41(210)
Interactive, 41(203)
Interest risk, 41(302)
Interior moves, 40(322)
Inventory, 38(2), 39(174), 39(180), 40(16), 40(252), 41(174), 41(261), 42(1), 43(88), 43(168)
Investment, 40(43), 40(155)

Job shop, 43(267)
Joint replenishment, 38(2)
JSQ rule, 41(157)

Kalman filter, 41(15)
Knapsack with GUB, 38(242)
Knowledge base, 42(111)
Knowledge base design, 42(111)
Kuhn–Tucker conditions, 42(203)

Lagrangean multipliers, 39(325), 39(332), 43(197)
Lagrangean relaxation, 38(76), 39(213), 42(305)
Lanchester equations, 38(178)
Lead times, 40(196)
Learning, 40(78), 42(190)
Least squares method, 42(203)
Length of time interval, 43(292)
Lexicographic ordering, 41(347)
Lexminmax, 43(245)
Linear complementarity, 40(337)
Linear complementarity problem, 39(305)
Linear programming, 38(98), 39(131), 40(299), 40(322), 40(58), 41(240), 41(270), 42(129), 42(254)
Liquid by-products, 41(270)
Little's formula, 41(54)
Local minimizer, 40(85)
Location in a congested environment, 39(192)
Location problems, 39(231)
Location routing, 39(71)
Location theory, 42(294)
Location, 38(14), 38(94), 39(157), 40(58), 40(275)
Lot sizing, 41(181), 42(190)
Lp-programming, 42(254)
LR type fuzzy numbers, 41(210)
Lumber production, 42(243)

M/G/1 queue, 42(88)
Machine availability, 41(54)
Macroeconomics, 42(279)
Maintenance, 38(35)
Makespan, 41(186)
Management science, 42(268)
Management, 38(369), 39(180)
Manufacturing, 40(196), 43(78)
Manufacturing flexibility, 43(119)
Manufacturing industries, 38(98), 39(274), 40(1), 40(155), 41(108), 41(335)
Market segmentation, 41(127)
Marketing, 40(186), 42(1)
Marketing/ production integration, 40(196)
Markov chains, 40(257)
Markov decision programming, 39(1)
Markov process, 39(32)
Markov reward models, 40(257)
Mathematical programming, 39(131), 40(70), 42(166), 42(39), 43(13), 43(88), 43(305)
Matrix geometric solutions, 38(184)
Maxima of fuzzy numbers, 43(174)
Maxima of stochastic variables, 43(174)
Maximum flow, 39(103), 43(65)
Measurement, 38(358), 39(40), 40(135)
Median, 38(94)
Mediation in conflicts, 40(109)
Metamodeling, 42(268)
Metasystem, 42(268)
Microcomputer, 41(270)
Military, 38(178), 38(208)
Min–max objective, 41(218)
Minimum project duration, 43(174)
Minimum spanning tree, 39(332)
Mining, 38(56)
Mixed-integer linear programming, 42(178)
Mixed-integer programming, 43(13)
Mixing, 42(254)
Model validation, 42(59)
Modeling, 41(33), 42(268)
Models, 38(290)
Moral hazard, 40(155)
Multi-criteria problem, 42(294)
Multi-criteria decision making, 43(263)
Multi-critical path networks, 43(284)
Multicriteria decision aid, 42(313)
Multicriteria fuzzy linear programming, 41(210)

Multidimensional scaling, 41(127)
Multi-model assignment, 43(34)
Multiobjective decision, 43(245)
Multiple atttribute, 39(293)
Multiple criteria, 39(284), 41(23), 41(203), 41(347), 43(216)
Multiple criteria decision making, 43(317)
Multiple criteria programming, 38(63), 39(61), 41(355), 43(53), 42(326)
Multiprojects resources, 41(1)
Multivariate statistics, 43(184)

Nash equilibria, 39(231)
Natural and renewable resources, 42(229)
Network design, 43(34)
Network flows, 39(213), 40(32)
Network planning, 43(174)
Network programming, 38(213), 42(152), 42(326), 43(53), 43(216)
Networks, 38(76), 38(94), 39(103), 39(332), 41(290), 43(13), 43(88)
Neural computing, 39(79)
Neural networks, 39(119)
Non-inferior solutions, 38(255)
Non-linear congestion network, 30(292)
Non-linear optimization, 39(192)
Non-stationary, 41(15)
Nonlinear integer programming, 38(238)
Nonlinear programming heuristics, 41(335)
Nonlinear programming, 39(131), 39(305), 40(70), 41(23)
Nonparametric, 41(73)
Nonserial dynamic programming, 43(327)
Normative modelling, 43(174)
Notion of (λ, μ) efficiency, 42(294)
Noxious, 40(275)
Numerical scaling, 40(109)

Obnoxious, 40(275)
Open-loop quality control, 42(88)
Operating time, 41(162)
Operations research, 39(119), 42(268)
Operative utilization, 41(54)
Optimal control, 40(22)
Optimization, 38(56), 39(103), 39(206), 39(61), 41(44), 42(203), 42(313), 43(88), 43(327)
OR, 38(290)
Ordinary differential equations, 38(178)
Organizational decision making, 42(268)
Orienteering problem, 41(224)
Out analysis, 43(206)
Outliers, 39(243)
Overtime, 39(274)

Pairwise comparisons, 40(109)
Paradigm, 42(268)
Paradigm displacement, 42(268)
Parametric programming, 41(355)
Parametric transportation, 41(218)
Pareto, 43(245)
Partial differential equations, 38(178)
Partitioning, 42(111)
Path packing, 40(32)
Performance, 38(358)
Performability models, 40(257)
Performance bounds, 43(143)
Performance comparison, 41(224)
Performance modeling, 40(257)
Philosophy, 38(113), 41(142)
Piecewise linear functions, 39(305)
Planning, 38(14), 38(98), 39(131), 39(157), 43(78), 43(342)
Policy analysis, 40(292)
Pontrjagin's maximum principle, 42(142)
Port facilities, 41(44)
Portfolio selection problem, 40(329)
Possibilistic linear systems, 40(389)
Possibility theory, 40(135)
Practice, 38(113), 38(318), 38(369), 39(131), 41(33), 41(101), 41(108), 43(161), 43(342)
Precedence, 43(284)
Preference modelling, 40(309)
Price discount, 41(261)
Pricing, 40(38), 40(155)
Priority queueing networks, 38(184)
Probabilistic programming, 40(329)
Probabilistic set, 43(263)
Probability, 38(307), 38(318), 40(377), 43(350)
Probability generating function, 38(202)
Probability theory, 40(135)
Product design, 41(127)
Production, 39(17), 41(321), 43(88)
Production mix, 42(142)
Production planning, 38(27), 41(169)
Production scheduling, 40(1)
Production–inventory systems, 42(142)
Programming, 41(203)
Project crashing, 43(284)
Project management, 41(1), 43(271), 43(284)
Pseudo-polynomial algorithms, 43(267)
Public sector project selection, 42(129)
Public service, 40(58)

Quadratic programming, 40(337), 40(85), 42(254), 43(161)
Quality, 38(35), 42(190)
Quality control, 42(88)
Quasiconvexity, 43(245)
Queues, 40(99), 41(157)
Queueing applications, 39(192)

R&D, 38(329)
Random breakdowns, 39(32)
Random environments, 41(162)
Random set, 40(135)
Randomness, 43(174)
Rationality, 38(307)
Rationality conditions, 40(309)
Real shop, 39(274)
Real-time control, 43(44)
Real-time planning, 43(44)
Recoverable/consumable item control, 40(210)
Recursion, 38(56)
Reducted gradient method, 42(203)
Reduction process, 40(322)
Redundant goals, 41(347)
Regression, 40(352), 40(389), 41(15), 43(184)
Regression analysis, 38(86)
Rejection probability, 38(44)
Relationships with other disciplines, 41(142), 43(3)
Reliability, 40(58)
Reliability modeling, 40(257)
Repair, 39(206)
Repair time, 41(54), 41(162)
Repairable inventory system, 40(210)
Representation of fluctuating demand, 42(178)
Research, 43(313)
Resources, 38(329)
Resource allocation, 38(98), 41(218)
Risk, 38(301), 38(307)
Risk analysis, 40(377)
Road transportation, 38(14), 42(152)
Robotics, 38(167)
Routing, 42(39)
Running time, 41(54)

Scalarizing methods, 39(61)
Scenario, 38(350), 41(302), 43(342)
Scheduling, 38(156), 38(167), 38(213), 38(228), 40(1), 40(90), 40(222), 40(243), 41(194), 41(277), 42(152), 42(313), 43(88), 43(143), 43(225)
Scheduling practice, 39(17)
Scheduling problem, 41(186)
Scientific revolution, 42(268)
Sea transport, 41(44)
Semi-norms, 39(293)
Semicontinuity, 43(245)
Senior-management, 41(101)
Sensitivity analysis, 38(63), 40(257), 43(292)
Service, 38(35)
Service capacity provision, 39(261)
Servicing, 39(206)
Set covering-application, 38(27)
Set partitioning, 38(76), 41(232)
Shrimp, 40(22)
Simple ranking method, 40(329)
Simulated annealing, 39(79), 39(119)
Simulation, 38(86), 39(138), 39(274), 40(352), 40(377), 41(290), 42(59), 42(213), 43(184), 43(206)
Social optima, 39(231)
Software engineering, 41(33)

Solution, 38(70)
Spatial dependence, 38(178)
Spatial optimization, 39(231)
Spectral analysis, 42(279)
Statistical analysis, 43(231)
Statistical estimation, 42(254)
Statistics, 40(135), 41(240)
Steiner tree on graph, 39(332)
Stimulation, 41(44)
Stochastic, 38(2)
Stochastic linear knapsack problem, 40(329)
Stochastic process, 38(208), 39(32)
Stochastic programming, 39(71)
Stocking policies, 40(210)
Strategic planning, 38(290)
Strategy, 38(350)
Subgradient optimization, 39(96)
Submatrix, 38(76)
Substitutable resources, 41(218)
Sufficiency, 40(363)
Surrogate duality, 38(238)
Survey, 38(156)
Survey article, 42(1)
Symmetry, 38(70)
System analysis, 38(290)
System dynamics, 42(59)
System failure, 41(162)
Systems, 42(59)

Taboo search techniques, 41(186)
Tabu search, 39(119)
Tardiness, 40(222)
Testing, 42(59)
Three dimensional assignment, 38(255)
Time series, 39(243), 41(174)
Time–cost tradeoff, 38(255)
Timetabling, 40(32)
Trade-offs of concessions, 40(109)
Traffic assignment, 41(232)
Traffic control, 42(152)
Traffic management, 40(292)
Transfer function identification, 42(279)
Transformation, 38(76)
Transient analysis, 40(257)
Transportation, 38(213), 43(13)
Transportation programming, 43(305)
Traveling salesman problem, 38(70), 39(79), 39(96), 41(186), 41(224), 43(231), 43(313)
Triangle inequality, 38(70)
Triangular membership functions, 43(174)
Triangular norms, 40(309)
Two machines, 43(267)
Uncertainty, 38(307)
Undesirable, 40(275)
Unit processing times, 43(267)
Unit root stationarity, 39(243)
Utility, 38(307)

Vagueness, 43(174)
Value functions, 39(293)
Valued preference relations, 40(309)
Variance reduction, 38(86), 40(352)
Variational inequalities, 40(337), 42(166)
Vehicle routing, 39(71), 39(150)
Vendor, 41(261)
Visual interactive modelling, 39(138)
Voting, 41(314)

Warranty, 39(206)
Weak convergence, 41(162)
Weighted matroid intersection, 39(96)
Weighting vectors, 39(293)
Workload distribution, 42(22)
Worst case, 40(186)
Worst case analysis, 40(243), 43(143)

Yield management, 43(3)

European Journal of Operational Research 43 (1989) 370–377
North-Holland

Author Index

Volumes 38–43 (1989)

Aarts, E.H.L. and J.H.M. Korst, Boltzmann machines for travelling salesman problems 39, 79– 95
Abdulaal, M., An optimum link improvement model with a computer algorithm 43, 34– 43
Aboudi, R., Å. Hallefjord, C. Helgesen, R. Helming, K. Jørnsten, A.S. Pettersen, T. Raum and P. Spence, A mathematical programming model for the development of petroleum fields and transport systems 43, 13– 25
Abutouq, G., *see* V. Kouskoulas 43, 284–291
Adam, N.R. and S.W. Klein, On coverage probability, independence and normality in batch means algorithms 43, 206–215
Adams, B.J., *see* S.L. Ong 43, 292–304
Adshead, N.S. and D.H.R. Price, Overtime decision rule experiments with a model of a real shop 39, 274–283
Ali, A.I. and H. Thiagarajan, A network relaxation based enumeration algorithm for set partitioning 38, 76– 85
Amador, F., and C. Romero, Redundancy in lexicographic goal programming: An empirical approach 41, 347–354
Anandalingam, G. and C.E. Olsson, A multi-stage multi attribute decision model for project selection 43, 271–283
Andersson, S.-E., Operational planning in airline business—Can science improve efficiency? Experiences from SAS 43, 3– 12
Arbel, A., Approximate articulation of preference and priority derivation 43, 317–326
Ashford, R.W. and E.M.L. Beale, Using martingales to make stochastic simulations more precise 38, 86– 93
Ashford, R.W. and E.M.L. Beale, A cross-estimation technique for using control variables in stochastic simulations 40, 352–362
Atanassov, A., *see* V. Sgurev 43, 44– 52
Ayres, R.U. and S. Mori, Time preference and the life cycle: The logic of long-term high risk vs. short-term low risk 38, 329–349

Baker, H.M., *see* L.S. Franz 41, 277–289
Baker, J.R., E.R. Clayton, and L.J. Moore, Redesign of primary response areas for county ambulance services (*Case Study*) 41, 23– 32
Balachandran, K.R. and J. Ronen, Incentive contracts when production is subcontracted 40, 169–185
Banker, R.D., A. Charnes, W.W. Cooper and R. Clarke, Constrained game formulations and interpretations for data envelopment analysis 40, 299–308
Banker, R.D., A. Charnes, R. Clarke and W.W. Cooper, Erratum to "Constrained game formulations and interpretations for data envelopment analysis" 42, 101
Barlas, Y., Multiple tests for validation of system dynamics type of simulation models 42, 59– 87
Barthélemy, J.P., A. Guenoche and O. Hudry, Median linear orders: Heuristics and a branch and bound algorithm 42, 313–325
Batta, R., A queueing–location model with expected service time dependent queueing disciplines 39, 192–205
Beale, E.M.L., *see* R.W. Ashford 38, 86– 93
Beale, E.M.L., *see* R.W. Ashford 40, 352–362
Behringer, F.A., A local version of Karamardian's theorem on lower semicontinuous strictly quasiconvex functions 43, 245–262
Bell, P.C., *see* P. Kirkpatrick 39, 138–149
Bessler, D.A., *see* A. Sadeh 40, 22– 31
Bessler, W., *see* G.G. Booth 41, 302–313
Bettonvil, B., A formal description of discrete event dynamic systems including infinitesimal perturbation analysis 42, 213–222
Björheden, R., *see* L.O. Eriksson 43, 26– 33
Boas, J., Forecasting under unstable conditions: A case study of the cocoa market (*Case Study*) 41, 15– 22
Booth, G.G., W. Bessler and W.G. Foote, Managing interest-rate risk in banking institutions 41, 302–313
Botten, N., A. Kusiak and T. Raz, Knowledge bases: Integration, verification, and partitioning (*Invited Review*) 42, 111–128
Brans, J.P., *see* Ph. Du Bois 39, 284–292
Brucker, P.J. and H.W. Hamacher, *k*-optimal solution sets for some polynomially solvable scheduling problems 41, 194–202
Brumbaugh-Smith, J. and D. Shier, An empirical investigation of some bicriterion shortest path algorithms 43, 216–224
Buckley, J.J., Fuzzy input–output analysis 39, 54– 60

0377-2217/89/$3.50 © 1989, Elsevier Science Publishers B.V. (North-Holland)

Bunday, B.D. and E. Khorram, The efficiency of uni-directionally patrolled machines with two robot repairmen 39, 32–39
Burkard, R.E., *see* B. Fruhwirth 42, 326–338
Buxey, G., Production scheduling: Practice and theory 39, 17–31

Cantraine, F., *see* Ph. Du Bois 39, 284–292
Carey, M., Estimating nonparametric convex functions using gradient data 41, 73–85
Carino, H.F., *see* C.H. Lenoir, Jr. 38, 98–103
Cavalier, T.M., *see* J.-D. Hong 38, 208–212
Chahal, N. and D. de Werra, An interactive system for constructing timetables on a PC 40, 32–37
Chand, S., Lot sizes and setup frequency with learning in setups and process quality 42, 190–202
Chandra, M.J., *see* J.-D. Hong 38, 208–212
Chappell, D. and J.M. Norman, Optimal, near-optimal and rule-of-thumb claiming rules for a protected bonus vehicle insurance policy 41, 151–156
Charnes, A., S. Duffuaa and A. Yafi, A non-linear congestion network model for planning internal movement in the Hajj 40, 292–298
Charnes, A., *see* R.D. Banker 40, 299–308
Charnes, A., *see* R.D. Banker 42, 101
Chatterjee, U. and S.P. Mukherjee, On the non-homogeneous service system $M^X/G/\infty$ 38, 202–207
Cheng, T.C.E. and M.C. Gupta, Survey of scheduling research involving due-date determination decisions 38, 156–166
Cheng, T.C.E., Corrigendum to "An alternative proof of optimality for the common due-date assignment problem" 38, 259
Cheng, T.C.E. An economic production quantity model with flexibility and reliability considerations 39, 174–179
Cheng, T.C.E. An economic order quantity model with demand-dependent unit cost 40, 252–256
Cheng, T.C.E., Optimal production policy for decaying items with decreasing demand 43, 168–173
Cherene, L.J., *see* P.V. Schaeffer 42, 178–189
Chrétienne, P., A polynomial algorithm to optimally schedule tasks on a virtual distributed system under tree-like precedence constraints 43, 225–230
Clarke, H.R., Combinational aspects of cropping pattern selection in agriculture 40, 70–77
Clarke, R., *see* R.D. Banker 40, 299–308
Clarke, R., *see* R.D. Banker 42, 101
Clausen, J., OR in Transportation—NOAS '87 43, 1–2
Clayton, E.R., *see* J.R. Baker 41, 23–32
Coats, P.K., A banker's use of simulation and artificial intelligence for assessing the economics of electronic money networks 41, 290–301
Cohon, J.L., *see* R.S. Solanki 41, 355–366
Collcutt, R.H., Advising very senior management—some reflections 41, 101–107
Cooper, W.W., *see* R.D. Banker 40, 299–308
Cooper, W.W., *see* R.D. Banker 42, 101
Curiel, I., G. Pederzoli and S. Tijs, Sequencing games 40, 344–351
Curtayne, P.C., *see* F. Hugo 42, 129–141
Czogała, E. and M. Roubens, An approach to multi-criteria decision making problems using probabilistic set theory 43, 263–266

Dockery, J., *see* V. Protopopescu 38, 178–183
Dokev, N., *see* V. Sgurev 43, 44–52
Dost, H.-U., J. Terno and G. Scheithauer, On the stochastic complexity of the asymmetric traveling salesman problem 43, 313–316
Drangajov, S., *see* V. Sgurev 43, 44–52
Drezner, Z. and G.O. Wesolowsky, Multi-buyer discount pricing 40, 38–42
Du Bois, Ph. J.P. Brans, F. Cantraine and B. Mareschal, MEDICIS: An expert system for computer-aided diagnosis using the PROMETHEE multicriteria method 39, 284–292
Dubois, D. and H. Prade, Fuzzy sets, probability and measurement (*Invited Review*) 40, 135–154
Duffuaa, S., *see* A. Charnes 40, 292–298
Duin, C. and A. Volgenant, Reducing the hierarchical network design problem 39, 332–344
Dunsmuir, W.T.M. and R.D. Snyder, Control of inventories with intermittent demand (*Case Study*) 40, 16–21

Eiselt, H.A. and G. Laporte, Competitive spatial models (*Invited Review*) 39, 231–242
Elmaghraby, S.E., The knapsack problem with generalized upper bounds 38, 242–254
Eriksson, L.O. and R. Björheden, Optimal storing, transport and processing for a forest-fuel supplier 43, 26–33
Erkut, E. and S. Neuman, Analytical models for locating undesirable facilities (*Invited Review*) 40, 275–291
Evans, J.R., *see* S.H. Zanakis 43, 88–110

Fang, L., K.W. Hipel and D.M. Kilgour, Conflict models in graph form: Solution concepts and their interrelationships 41, 86–100
Fathi, Y. and K.G. Murty, Computational behavior of a feasible direction method for linear programming 40, 322–328
Ferland, J.A. and L. Fortin, Vehicles scheduling with sliding time windows 38, 213–226
Field, E., *see* M. Shutler 38, 369–375
Foote, W.G., *see* G.G. Booth 41, 302–313
Fortin, L., *see* J.A. Ferland 38, 213–226
Fortuin, L. and M. Zijlstra, Operational Research in practice: Experiences of an OR group in industry 41, 108–121
Fortuin, L., *see* H.J. Grünwald 41, 142–150
Franz, L.S., H.M. Baker, G.K. Leong and T.R. Rakes, A mathematical model for scheduling and staffing multiclinic health regions (*Case Study*) 41, 277–289
Fraser, J.M. and J.W. Posey, A framework for replacement analysis 40, 43– 57
Frieze, A.M. and J. Yadegar, A new integer programming formulation for the permutation flowshop problem 40, 90– 98
Fruhwirth, B., R.E. Burkard and G. Rote, Approximation of convex curves with application to the bicriterial minimum cost flow problem 42, 326–338

Geetha, S. and M.N. Vartak, Time-cost tradeoff in a three dimensional assignment problem 38, 255–258
Gelders, L.F., *see* J.M. Nambiar 38, 14– 26
Genova, K., *see* V. Sgurev 43, 44– 52
Geoffrion, A., Computer-based modeling environments 41, 33– 43
Gershon, M.E. and F.H. Murphy, Optimizing single hole mine cuts by dynamic programming 38, 56– 62
Glover, F. and H.J. Greenberg, New approaches for heuristic search: A bilateral linkage with artificial intelligence (*Invited Review*) 39, 119–130
Gochet, W. and M. Vandebroek, A dynamic programming based heuristic for industrial bying of cardboard 38, 104–112
Goetschalckx, M. and C. Jacobs-Blecha, The vehicle routing problem with backhauls 42, 39– 51
Golany, B., *see* Y. Roll 43, 136–142
Goldberg, J. and J. Zhu, Module design with substitute parts and multiple vendors 41, 335–346
Gonzalez, J.J., *see* G.R. Reeves 41, 203–209
Goyal, S., *see* Y.P. Gupta 43, 119–135
Goyal, S.K. and A.T. Şatir, Joint replenishment inventory control: Deterministic and stochastic models. (*Invited Review*) 38, 2– 13
Goyal, S.K. and Y.P. Gupta, Integrated inventory models: The buyer–vendor coordination (*Invited Review*) 41, 261–269
Green, P.E., *see* A.M. Krieger 41, 127–141
Green, P.E. and A.M. Krieger, Recent contributions to optimal product positioning and buyer segmentation (*Invited Review*) 41, 127–141
Greenberg, H.J., *see* F. Glover 39, 119–130
Grünwald, H.J. and L. Fortuin, DSS and ES in the 'Information organisation'—Back to the roots of OR 41, 142–150
Griffin, W.L., *see* A. Sadeh 40, 22– 31
Guenoche, A., *see* J.P. Barthélemy 42, 313–325
Guerard, Jr., J.B., An investigation into adequate data for estimating annual earnings time series models 39, 243–253
Guignard, M. and M.B. Rosenwein, An application-oriented guide for designing Lagrangean dual ascent algorithms 43, 197–205
Guimarães, R.C. and B.G. Kingsman, Simulation-optimization: The method and its application in the analysis of grain terminal operations 41, 44– 53
Gupta, M.C., *see* T.C.E. Cheng 38, 156–166
Gupta, S.K. and A.P. Punnen, Group centre and group median of a network 38, 94– 97
Gupta, Y.P., *see* S.K. Goyal 41, 261–269
Gupta, Y.P. and S. Goyal, Flexibility of manufacturing systems: Concepts and measurements 43, 119–135

Haehling von Lanzenauer, C., *see* D.D. Wright 42, 305–312
Hallefjord, Å., *see* R. Aboudi 43, 13– 25
Hamacher, H.W., *see* P.J. Brucker 41, 194–202
Hansen, P., M. Labbé and R.E. Wendell, Sensitivity analysis in multiple objective linear programming: The tolerance approach 38, 63– 69
Hansen, P., A short discussion of the OR crisis 38, 277–281
Hariri, A.M.A. and C.N. Potts, A branch and bound algorithm to minimize the number of late jobs in a permutation flow-shop 38, 228–237
Harrison, T.P. and J.E. Ketz, Modeling learning effects via successive linear programming 40, 78– 84
Hayashi, I., *see* H. Tanaka 40, 389–396
Hedge, G.G. and P. Kubat, Diagnostic design: A product support strategy 38, 35– 43
Helgesen, C., *see* R. Aboudi 43, 13– 25

Helming, R., *see* R. Aboudi 43, 13– 25
Henderson, W., *see* M. Rumsewicz 38, 184–201
Hendriks, Th.H.B., *see* M.P. Reinders 42, 243–253
Hendry, L.C., *see* B.G. Kingsman 40, 196–209
Hendry, L.C. and B.C. Kingsman, Production planning systems and their applicability to make-to-order companies (*Invited Review*) 40, 1– 15
Hertz, A., *see* M. Widmer 41, 186–193
Heuts, R.M., *see* W.J. Selen 41, 181–185
Heyden, M.C. van der and A. Schornagel, Erratum to "Interval uneffectiveness distribution for a *k*-out-of-*n* multistate reliability system with repair" 38, 117
Higgins, J.C., Performance measurement in universities 38, 358–368
Hintz, G.W. and H.-J. Zimmermann, A method to control Flexible Manufacturing Systems 41, 321–334
Hipel, K.W., *see* L. Fang 41, 86–100
Holst, J., *see* S. Rasmussen 42, 279–293
Hong, J.-D., M.J. Chandra and T.M. Cavalier, The assignment of minimum crews among bases in an airlift operation 38, 208–212
Hooijmans, F.C., *see* H.S. van der Knoop 43, 161–167
Hsu, L.-F. and C.S. Tapiero, Quality control of the M/G/1 Queue 42, 88–100
Huang, H.C., *see* H.L. Ong 43, 231–238
Hudry, O., *see* J.P. Barthélemy 42, 313–325
Hugo, F., W.J. Scholtz, M. Sinclair and P.C. Curtayne, Management of pavement rehabilitation (*Case Study*) 42, 129–141
Husain, A., *see* B.S.N. Murty 42, 203–212

Ishii, H., *see* H. Morita 40, 329–336

Jacobs-Blecha, C., *see* M. Goetschalckx 42, 39– 51
Jaffray, J.Y., Some experimental findings on decision making under risk and their implications 38, 301–306
Jeromin, B. and F. Körner, Triangle inequality and symmetry in connection with the assignment and the traveling salesman problem 38, 70– 75
Johri, P.K., Optimality of the shortest line discipline with state-dependent server rates 41, 157–161
Jørnsten, K., *see* R. Aboudi 43, 13– 25

Kara, I., Research pertaining to the development of operations research: The case of Turkey 38, 113–116
Karkazis, J., Facilities location in a competitive environment: A promethee based multiple criteria analysis 42, 294–304
Keller, C.P., Algorithms to solve the orienteering problem: A comparison 41, 224–231
Keppe, H.-J. and M. Weber, Stochastic dominance with incomplete information on probabilities 43, 350–355
Ketz, J.E., *see* T.P. Harrison 40, 78– 84
Khorram, E., *see* B.D. Bunday 39, 32– 39
Kilgour, D.M., *see* L. Fang 41, 86–100
Kim, I., *see* K.E. Stecke 42, 22– 38
Kingsman, B.G., *see* L.C. Hendry 40, 1– 15
Kingsman, B.G., I.P. Tatsiopoulos and L.C. Hendry, A structural methodology for managing manufacturing lead times in make-to-order companies 40, 196–209
Kingsman, B.G., *see* R.C. Guimarães 41, 44– 53
Kirkpatrick, P. and P.C. Bell, Simulation modelling: A comparison of visual interactive and traditional approaches 39, 138–149
Klafszky, E., J. Mayer and T. Terlaky, Linearly constrained estimation by mathematical programming 42, 254–267
Klein, S.W., *see* N.R. Adam 43, 206–215
Kohlas, J., Modeling uncertainty with belief functions in numerical models 40, 377–388
Kohli, R. and R. Krishnamurti, Optimal product design using conjoint analysis: Computational complexity and algorithms 40, 186–195
Körkel, M., On the exact solution of large-scale simple plant location problems 39, 157–173
Körner, F., *see* B. Jeromin 38, 70– 75
Körner, F., A hybrid method for solving nonlinear knapsack problems 38, 238–241
Körner, F., Remarks on second-order conditions in connection with the algorithm of Beale for quadratic programming 40, 85– 89
Korsemov, Ch., *see* V. Sgurev 43, 44– 52
Korst, J.H.M., *see* E.H.L. Aarts 38, 274–276
Kouskoulas, V. and G. Abutouq, An influence matrix for project expediting 43, 284–291
Krarup, J., EURO Gold Medal 1986: A parable on two-level parallelism 38, 274–276
Krauth, J. and J. Warschat, An optimal production-mix model 42, 142–151

Krinsky, I. and M. Parlar, Optimal plant size with variable cost and revenue streams 43, 78–87
Krishnamurti, R., *see* R. Kohli 40, 186–195
Kubat, P., *see* G.G. Hedge 38, 35–43
Kubiak, W., A pseudo-polynomial algorithm for a two-machine no-wait job-shop scheduling problem 43, 267–270
Kusiak, A., *see* N. Botten 42, 111–128

Labbé, M., *see* P. Hansen 38, 63–69
Lane, D.E., Operational research and fisheries management (*Invited Review*) 42, 229–242
Laporte, G., Integer programming formulations for the multi-depot vehicle routing problem: Comments on paper by Kulkarni and Bhave 38, 227
Laporte, G., F. Louveaux and H. Mercure, Models and exact solutions for a class of stochastic location-routing problems 39, 71–78
Laporte, G., *see* H.A. Eiselt 39, 231–242
Lasdon, L., *see* A. Roy 39, 131–137
Leclerc, M. and F. Rendl, Constrained spanning trees and the traveling salesman problem 39, 96–102
Lee, C.Y., Optimal procedures and complexity analyses of nonserial converging branch networks 43, 327–341
Lee, H.L., *see* C.S. Tapiero 39, 261–273
Lee, H.L. and K. Moinzadeh, A repairable item inventory system with diagnostic and repair service 40, 210–221
Lee, T.H., Making models matter—Lessons from experience 39, 290–300
Leipälä, T. and O. Nevalainen, Optimization of the movements of a component placement machine 38, 167–177
Lenoir, C.H., Jr. and H.F. Carino, Minimizing wood raw material cost in cabinet manufacturing 38, 98–103
Leong, G.K., *see* L.S. Franz 41, 277–289
Lesourne, J., The OR contribution to strategy formulation in a turbulent environment 38, 286–289
Lieberman, M.B., Capacity utilization: Theoretical models and empirical tests 40, 155–168
Lootsma, F.A., Conflict resolution via pairwise comparison of concessions 40, 109–116
Lootsma, F.A., Stochastic and fuzzy PERT 43, 174–183
Louveaux, F. *see* G. Laporte 39, 71–78
Lüthi, H.-J., Linear complementary problem with upper bounds 40, 337–343

Mareschal, B., *see* Ph. Du Bois 39, 284–292
Mayer, J., *see* E. Klafszky 42, 254–267
Mercure, H., *see* G. Laporte 39, 71–78
Meristö, T., Not forecasts but multiple scenarios when coping with uncertainties in the competitive environment 38, 350–357
Minoux, M., *see* C.C. Ribeiro 41, 232–239
Moinzadeh, K., *see* H.L. Lee 40, 210–221
Moore, L.J., *see* J.R. Baker 41, 23–32
Mori, S., *see* R.U. Ayres 38, 329–349
Morita, H., H. Ishii, T. Nishida, Stochastic linear knapsack programming problem and its application to a portfolio selection problem 40, 329–336
Mosekilde, E., *see* S. Rasmussen 42, 279–293
Mukherjee, S.P., *see* U. Chatterjee 38, 202–207
Munford, A.G., A microcomputer system for formulating animal diets which may involve liquid raw materials (*Case Study*) 41, 270–276
Munier, B., New models of decision under uncertainty: An interpretative essay 38, 307–317
Murphy, F., *see* M.E. Gershon 38, 56–62
Murthy, D.N.P., *see* D.G. Nguygen 39, 206–212
Murty, B.S.N., P.J. Reddy and A. Husain, Numerical experience with conjugate direction methods in constrained minimization 42, 203–212
Murty, K.G., *see* Y. Fathi 40, 322–328

Nagurney, A., The formulation and solution of large-scale multicommodity equilibrium problems over space and time 42, 166–177
Nambiar, J.M., L.F. Gelders and L.N. Van Wassenhove, Plant location and vehicle routing in the Malaysian rubber smallholder sector: A case study (*Case Study*) 38, 14–26
Nelson, B.L., Batch size effects on the efficiency of control variates in simulation 43, 184–196
Neumann, S., *see* E. Erkut 40, 275–291
Nevalainen, O., *see* T. Leipälä 38, 167–177
Nguyen, D.G. and D.N.P. Murthy, Optimal replace–repair strategy for servicing products sold with warranty 39, 206–212
Nishida, T., *see* H. Morita 40, 329–336
Nobel, R.D., Practical approximations for finite-buffer queueing models with batch arrivals 38, 44–55
Norman, J.M., *see* D. Chappell 41, 151–156

Ogryczak, W., K. Studziński and K. Zorychta, A solver for the multi-objective transshipment problem with facility location 43, 53–64
O'Leary, D.E., *see* J.R. Schaffer 43, 305–312
Olsson, C.E., *see* G. Anandalingam 43, 271–283
Ong, H.L. and H.C. Huang, Asymptotic expected performance of some TSP Heuristics: An empirical evaluation 43, 231–238
Ong, S.L. and B.J. Adams, The effect of discretizing the planning period on the optimal cost of capacity expansion systems 43, 292–304

Paixão, J. and M. Pato, A structural lagrangean relaxation for two-duty period bus driver scheduling problems 39, 213–222
Pang, J.-S. and C.-S. Yu, A min–max resource allocation problem with substitutions 41, 218–223
Paparrizos, K. and D. Solow, A finite improvement algorithm for the linear complementarity problem 39, 305–324
Parlar, M., *see* Q. Wang 42, 1–21
Parlar, M., *see* I. Krinsky 43, 78–87
Pato, M., *see* J. Paixão 39, 213–222
Pederzoli, G., *see* I. Curiel 40, 344–351
Penna, M.C., *see* C.C. Ribeiro 41, 232–239
Pettersen, A.S., *see* R. Aboudi 43, 13–25
Plane, D., *see* A. Roy 39, 131–137
Poiaga, L., Operations Research in project management and cost engineering: An outlook for new operational developments (*Invited Review*) 41, 1–14
Pósafalvi, A. and J. Sztrik, On the heterogeneous machine interference problem with priority and ordinary machines 41, 54–63
Posey, J.W., *see* J.M. Fraser 40, 43–57
Posner, M.J.M., *see* D. Sandhu 40, 99–108
Potts, C.N., *see* A.M.A. Hariri 38, 228–237
Prade, H., *see* D. Dubois 40, 135–154
Price, D.H.R., *see* N.S. Adshead 39, 274–283
Protopopescu, V., R.T. Santoro and J. Dockery, Combat modeling with partial differential equations 38, 178–183
Pulat, P.S., On the relation of max-flow to min-cut for generalized networks 39, 103–107
Pulat, P.S., Maximum outflow in generalized flow networks 43, 65–77
Punnen, A.P., *see* S.K. Gupta 38, 94–97

Rachamadugu, R.V., *see* N. Raman 40, 222–242
Rakes, T.R., *see* L.S. Franz 41, 277–289
Raman, N., R.V. Rachamadugu and F.B. Talbot, Real-time scheduling of an automated manufacturing center 40, 222–242
Rand, G.K., *see* S. Salhi 39, 150–156
Rasmussen, S., E. Mosekilde and J. Holst, Empirical indication of economic long waves in aggregate production 42, 279–293
Raum, T., *see* R. Aboudi 43, 13–25
Raz, T., *see* N. Botten 42, 111–128
Reddy, P.J., *see* B.S.N. Murty 42, 203–212
Reeves, G.R. and J.J. Gonzalez, A comparison of two interactive MCDM procedures 41, 203–209
Reibman, A.L., R. Smith and K. Trivedi, Markov and Markov reward model transient analysis: An overview of numerical approaches 40, 257–267
Reinders, M.P. and Th.H.B. Hendriks, Lumberproduction optimization (*Case Study*) 42, 243–253
Rendl, *see* M. Leclerc 39, 96–102
ReVelle, C., Review, extension and prediction in emergency service sitting models 40, 58–69
Reyman, G., State reduction in a dependent demand inventory model given by a time series 41, 174–180
Ribeiro, C.C., M. Minoux and M.C. Penna, An optimal column-generation-with-ranking algorithm for very large scale set partitioning problems in traffic assignment 41, 232–239
Richter, K. and J. Vörös, On the stability region for multi-level inventory problems 41, 169–173
Rickard, J., *see* D. Samson 39, 254–260
Rinks, D.B., *see* H. Schneider 39, 180–191
Rinnooy Kan, A.H.G., The future of Operations Research is bright 38, 282–285
Roll, Y., B. Golany and D. Seroussy, Measuring the efficiency of maintenance units in the Israeli Air Force (*Case Study*) 43, 136–142
Romero, C., *see* F. Amador 41, 347–354
Rommelfanger, H., Interactive decision making in fuzzy linear optimization problems 41, 210–217
Ronon, J., *see* K.R. Balachandran 40, 169–185
Rosenwein, M.B., *see* M. Guignard 43, 197–205
Rote, G., *see* B. Fruhwirth 42, 326–338

Roubens, M., Some properties of choice functions based on valued binary relations 40, 309–321
Roubens, M., *see* E. Czogała 43, 263–266
Roy, A., L. Lasdon and D. Plane, End-user optimization with spreadsheet models 39, 131–137
Rubin, P.A., Evaluating the maximize minimum distance formulation of the linear discriminant problem 41, 240–248
Rumsewicz, M. and W. Henderson, Closed two node priority queueing networks 38, 184–201

Sadeh, A., H. Talpaz, D.A. Bessler and W.L. Griffin, Optimization of management plans with short and long run problems: The case of shrimp productions (*Case Study*) 40, 22– 31
Sakawa, M. *see* H. Yano 39, 61– 70
Salhi, S. and G.K. Rand, The effect of ignoring routes when locating depots 39, 150–156
Samson, D., A. Wirth and J.R. Rickard, The value of information from multiple sources of uncertainty in decision analysis 39, 254–260
Sandhu, D. and M.J.M. Posner, A priority M/G/1 queue with application to voice/data communication 40, 99–108
Santoro, R.T., *see* V. Protopopescu 38, 178–183
Satir, A.T., *see* S.K. Goyal 38, 2– 13
Schaeffer, P.V. and L.J. Cherene, The inclusion of 'spinning reserves' in investment and simulation models for electricity generation 42, 178–189
Schaffer, J.R. and D.E. O'Leary, Use of penalties in a branch and bound procedure for the fixed charge transportation problem 43, 305–312
Scheithauer, G., *see* H.-U. Dost 43, 313–316
Schneider, H. and D.B. Rinks, Optimal policy surfaces for a multi-item inventory problem 39, 180–191
Scholtz, W.J., *see* F. Hugo 42, 129–141
Schornagel, A., *see* M.C. van der Heijden 38, 117
Selen, W.J. and R.M. Heuts, A modified priority index for Günther's lot-sizing heuristic under capacitated single stage production 41, 181–185
Serafini, P. and W. Ukovich, A mathematical model for the fixed-time traffic control problem 42, 152–165
Seroussy, D., *see* Y. Roll 43, 136–142
Sethi, S.P., *see* C. Sriskandarajah 43, 143–160
Sgurev, V., V. Sassilev, N. Dokev, K. Genova, S. Drangajov, Ch. Korsemov and A. Atanassov, TRASY—An automated system for real-time control of the industrial truck haulage in open-pit mines 43, 44– 52
Shier, D., *see* J. Brumbaugh-Smith 43, 216–224
Shutler, M. and E. Field, The truth, the whole truth and nothing but the truth 38, 369–375
Sinclair, M., *see* F. Hugo 42, 129–141
Smith, J.Q., Influence diagrams for Bayesian decision analysis 40, 363–376
Smith, R., *see* A.L. Reibman 40, 257–267
Sniedovich, M., The APL phenomenon: An operational research perspective (*Invited Review*) 38, 141–155
Snyder, R.D., *see* W.T.M. Duinsmuir 40, 16– 31
Solanki, R.S. and J.L. Cohon, Approximating the noninferior set in linear biobjective programs using multiparametric decomposition 41, 355–366
Solow, D., *see* K. Paparrizos 39, 305–324
Spence, P., *see* R. Aboudi 43, 13– 25
Sriskandarajah, C. and S.P. Sethi, Scheduling algorithms for flexible flowshops: Worst and average case performance 43, 143–160
Stecke, K.E. and I. Kim, Performance evaluation for systems of pooled machines of unequal sizes: Unbalancing versus balancing 42, 22– 38
Stevens, P., Two suggestions to improve on the efficiency of the check computations in the banking system in Belgium 42, 52– 58
Stott, Jr., K.L., *see* F.J. Vasko 38, 27– 34
Studziński, K., *see* W. Ogryczak 43, 53– 64
Sztrik, J., *see* A. Pósafalvi 41, 54– 63
Sztrik, J., Asymptotic analysis of some complex renewable systems operating in random environments 41, 162–168

Talbot, F.B., *see* N. Raman 40, 222–242
Talpaz, H., *see* A. Sadeh 40, 22– 31
Tanaka, H. and I. Hayashi, Possibilistic linear regression analysis for fuzzy data 40, 389–396
Tapiero, C.S. and H.L. Lee, Quality control and product servicing: A decision framework 39, 261–273
Tapiero, C.S., *see* L.-F. Hsu 42, 88–100
Tatsiopoulos, I.P., *see* B.g. Kingsman 40, 169–209
Terlaky, T., *see* E. Klafszky 42, 254–267
Terno, J., *see* H.-U. Dost 43, 313–316
Thiagarajan, H., *see* A.I. Ali 38, 76– 85

Tijs, S., *see* I. Curiel 40, 344–351
Tomlinson, R.C., Overcoming environmental turbulence 38, 269–273
Trivedi, K., *see* A.L. Reibman 40, 257–267

Ukovich, W., *see* P. Serafini 42, 152–165

van de Panne, C., Some comments on "Resource allocation in a large decentralized enterprise" 40, 117–119
van der Knoop, H.S. and F.C. Hooijmans, Optimal allocation of payments and receipts 43, 161–167
van Gigch, J.P., The potential demise of OR/MS: Consequences of neglecting epistemology 42, 268–278
Van Landeghem, R.R.G., Option Analysis: making better decisions faster 38, 318–328
Van Wassenhove, L.N., *see* J.M. Nambiar 38, 14– 26
Vandebroek, M., *see* W. Gochet 38, 104–112
Vartak, M.N., *see* S. Geetha 38, 255–258
Vasko, F.J., F.E. Wolf and K.L. Stott, Jr., A set covering approach to metallurgical grade assignment (*Case Study*) 38, 27– 34
Vassilev, V., *see* V. Sgurev 43, 44– 52
Vazacopoulos, A.A., *see* S.H. Zanakis 43, 88–110
Ventura, J.A. and S. Yeralan, The minimax center estimation problem for automated roundness inspection 41, 64– 72
Virtanen, I., *see* P. Yli-Olli 39, 40– 53
Vohra, R.V., Distance weighted voting and a single facility location problem 41, 314–320
Volgenant, A., A Lagrangean approach to the degree-constrained minimum spanning tree problem 39, 325–331
Volgenant, A., *see* C. Duin 39, 332–344
Vörös, J., *see* K. Richter 41, 169–173

Wang, Q. and M. Parlar, Static game theory models and their applications in management science (*Invited Review*) 42, 1– 21
Warschat, J., *see* J. Krauth 42, 142–151
Weber, M., *see* H.-J. Keppe 43, 350–355
Wendell, R.E., *see* P. Hansen 38, 63– 69
Werra, D. de, *see* N. Chanal 40, 32– 37
Wesolowsky, G.O., *see* Z. Drezner 40, 38– 42
White, D.J., *see* C.C. White, III 39, 1– 16
White, D.J., Using weighting vectors to solve multiple attribute problems: A framework 39, 293–304
White, III, C.C. and D.J. White, Markov decision processes (*Invited Review*) 39, 1– 16
Widberg, J., Operational threat assessments for civil defence planning 43, 342–349
Widmer, M. and A. Hertz, A new heuristic method for the flow shop sequencing problem 41, 186–193
Wirth, A., *see* D. Samson 39, 254–260
Wolf, F.E., *see* F.J. Vasko 38, 27– 34
Wright, D.D. and C. Haehling von Lanzenauer, Solving the fixed charge problem with Lagrangian relaxation and cost allocation heuristics 42, 305–312

Yadegar, J., *see* A.M. Frieze 40, 90– 98
Yafi, A., *see* A. Charnes 40, 292–298
Yano, H. and M. Sakawa, A unified approach for characterizing Pareto optimal solution of multiobjective optimization problems: The hyperplane method 39, 61– 70
Yeralan, S., *see* J.A. Ventura 41, 64– 72
Yli-Olli, P. and I. Virtanen, On the long-term stability and cross-country invariance of financial ratio patterns 39, 40– 53
Yu, C.-S., *see* J.-S. Pang 41, 218–223

Zanakis, S.H., J.R. Evans and A.A. Vazacopoulos, Heuristic methods and applications: A categorized survey 43, 88–110
Zdrzałka, S., Scheduling jobs on a single machine with periodic release data/deadline intervals 40, 243–251
Zhu, J., *see* J. Goldberg 41, 335–346
Zijlstra, M., *see* L. Fortuin 41, 108–121
Zimmermann, H.-J., *see* G.W. Hintz 41, 321–334
Zorychta, K., *see* W. Ogryczak 43, 53– 64

European Journal of Operational Research 43 (1989) 378–379
North-Holland

Book Review Index

Volumes 38–43 (1989)

Andreatta, G., F. Mason and P. Serafini (eds.), Stochastics in Combinatorial Optimization, 38(1) 123–124
Assad, A.A., see B.L. Golden, 38(1) 126–127
Beale, E.M.L., Introduction to Optimization, 43(2) 243–244
Beale, E.M.L., Introduction to Optimization, 39(3) 352
Beaumont, J.R., see E. Turban, 39(2) 225–226
Beck, M.B. (ed.), Systems Analysis in Water Quality Management, 38(1) 128–129
Bekiroglu, H. (ed.), Computer Models for Production and Inventory Control, 40(2) 270
Bertin, R., see M. Yazdani, 38(2) 263–264
Bertossi, A.A., see T. Nishizeki, 39(3) 350–351
Bonetto, R., Flexible Manufacturing Systems in Practice, 39(3) 347
Borgwardt, K.H., The Simplex Method, A Probabilistic Analysis, 43(2) 239–240
Bratko, I., see D. Michie, 39(3) 351–352
Broyden, C.G., see T. Ibaraki, 43(2) 240–241
Buffa, F.P., Inbound Logistics: Analysing Inbound Consolidation Opportunities, 38(2) 264–265
Bui, T., see J.K. Skwirzynski, 42(3) 341
Celona, J., see P. McNamee, 42(1) 104–105
Chiba, N., see T. Nishizeki, 39(3) 350–351
Collcutt, R.H., see G.K. Rand, 38(2) 265–266
Colson, G., see P. McNamee, 42(1) 104–105
Conway, D.A., see F.P. Buffa, 38(2) 264–265
Devlin, K., Mathematics: The New Golden Age, 38(1) 124–125
Dogramaci, A. and R. Färe (eds.), Applications of Modern Production Theory: Efficiency and Productivity, 39(2) 226
Drenth, P., see F. Heller, 39(3) 347–348
Färe, R., see A. Dogramaci, 39(2) 226
Fatti, L.P., see T.L. Saaty, 42(1) 107–109
Forgo, F., Nonconvex Programming, 42(1) 105–106
Friend, J. and A. Hickling, Planning under Pressure: The Strategic Choice, 41(2) 252–253
Friend, J.K., see N. Müller, 42(3) 343–344
Gallo, G., see B. Simeone, 39(3) 348–350
Golden, B.L. and A.A. Assad (eds.), Vehicle Routing: Methods and Studies, 38(1) 126–127
Gravenor, R.B., see R. Levary, 41(2), 251
Gupta, M.M. and T. Yamakawa (eds.), Fuzzy Logic in Knowledge-Based Systems, Decision and Control, 43(2) 241–243
Habenicht, W., see F. Seo, 42(1) 106–107
Heller F., P. Drenth, P. Koopman and V. Rus, Decisions in Organisations: A three Country Comparative Study, 39(3) 347–348
Hickling, A., see J. Friend, 41(2) 252–253
Hoffman, K.L., R.H.F. Jackson and J. Telgen (eds.), Computational Mathematical Programming, 39(2) 227–228
Hong, C.S. and Z. Quan, Integral Global Optimization, 38(2) 263
Ibaraki, T. and N. Katoh, Resource Allocation Problems: Algorithmic Approaches, 43(2) 240–241
Isermann, H., G. Merle, U. Rieder, R. Schmidt and L. Streitferdt (eds.), Operations Research Proceedings 1986: DGOR papers of the 15th annual meeting, 39(2) 226–227
Jackson, M., Advanced Spreadsheet Modelling with LOTUS-123, 40(2) 270–271
Jackson, R.H.F., see K.L. Hoffman, 39(2) 227–228
Jongen, H.Th., see C.S. Hong, 38(2) 263
Júdice, J.J., see K.G. Murty, 41(2) 251–252
Kacprzyk, J., see H.-J. Zimmermann, 38(1) 125
Kalvelagen, E., see B. Simeone, 39(3) 348–350
Kandel, A., see M. Schneider, 42(3) 342
Katoh, N., see T. Ibaraki, 43(2) 240–241
Kiangi, G., see G. Singh, 42(3) 342
Koopman, P., see F. Heller, 39(3) 347–348
Krarup, J., see G. Andreatta, 38(1) 123–124
Krarup, J., see B.L. Golden, 38(1) 126–127
Krarup, J., see R.F. Love, 38(1) 127–128
Kreweras, G., see K. Devlin, 38(1) 124–125
Levary, R. (ed.), Engineering Design: Better Results through Operations Research Methods, 41(2) 251
Lockett, A.G., see F. Heller, 39(3) 347–348
Love, R.F., J.G. Morris and G.O. Wesolowsky, Facilities Location: Models and Methods, 38(1) 127–128
Maffioli, F., see B. Simeone, 39(3) 348–350
Marti, K., Descent Directions and Efficient Solutions in Discretely Distributed Stochastic Programs, 38(2) 262
Martin-Clouaire, R., see M.M. Gupta, 43(2) 241–243
Mason, F., see G. Andreatta, 38(1) 123–124
McNamee, P. and J. Celona, Decision Analysis for the Professional with Supertree, 42(1) 104–105
Merle, G., see H. Isermann, 39(2) 226–227
Michie, D. and I. Bratko, Expert Systems, Automating Knowledge Acquisition, 39(3) 351–352
Montero, J., see M. Schneider, 42(3) 342
Morris, J.G., see R.F. Love, 38(1) 127–128
Mosler, K.C., Continuous Location of Transportation Networks, 40(2) 271–272
Mukai, H., see F. Forgo, 42(1) 105–106
Müller, N., K.-P. Schön and B. Thober, Real Structure Modelling: A Simulation-based Methodology for the Description of Large Scale Social Units, 42(3) 343–344

Volume and issue number are given in front of pagination. The names of reviewers are italicized.

0377-2217/89/$3.50 © 1989, Elsevier Science Publishers B.V. (North-Holland)

Murty, K.G., Linear Complementarity, Linear and Nonlinear Programming, 41(2) 251–252
Negoita, C.V., see H. Prade, 43(2) 239
Nishizeki, T. and N. Chiba, Planned Graphs: Theory and Algorithms, 39(3) 350–351
Odoni, A.R., see K.C. Mosler, 40(2) 271–272
Osleeb, J.P. and S.J. Ratick (eds.), Locational Decisions: Methodology and Applications, 40(2) 272
Pallotino, S., see B. Simeone, 39(3) 348–350
Patrizi, G., see J. Friend, 41(2) 252–253
Polak, C.G., see K. Marti, 38(2) 262
Prade, H. and C.V. Negoita, Fuzzy Logic in Knowledge, 43(2) 239
Quan, Z., see C.S. Hong, 38(2) 263
Raes, J., see E.M.L. Beale, 43(2) 243–244
Raes, J., see E.M.L. Beale, 39(3) 352
Rand, G.K. (ed.), Operational Research '87, 38(2) 265–266
Ratick, S.J., see J.P. Osleeb, 40(2) 272
Rieder, U., see H. Isermann, 39(2) 226–227
Rus, V., see F. Heller, 39(3) 347–348
Saaty, T.L., Decision Making for Leaders: The Analytical Hierarchy Process for Decisions in a Complex World, 42(1) 107–109
Sachs, E., see K.L. Hoffman, 39(2) 227–228
Sakawa, M., see F. Seo, 42(1) 106–107
Samson, D., Managerial Decision Analysis, 38(1) 123
Sander, P., see G. Singh, 42(3) 342
Schön, K.-P., see N. Müller, 42(3) 343–344
Schmidt, R., see H. Isermann, 39(2) 226–227
Schneider, M. and A. Kandel, Cooperative Fuzzy Expert Systems—Their Design and Applications in Intelligent Recognition, 42(3) 342
Seo, F. and M. Sakawa, Multiple Criteria Decision Analysis in Regional Planning, Concepts, Methods and Applications, 42(1) 106–107
Serafini, P., see G. Andreatta, 38(1) 123–124
Sideri, E.A., see K.H. Borgwardt, 43(2) 239–240
Simeone, B., P. Toth, G. Gallo, F. Maffioli and S. Pallotino (eds.), FORTRAN Codes for Network Optimization, 39(3) 348–350
Singh, G. and G. Kiangi, Risk and Reliability Appraisal on Microcomputers, 42(3) 342.
Skala, H.J., see H. Prade, 43(2) 239
Skwirzynski, J.K. (ed.), Software System Design Methods, The Challenge of Advanced Computing Technology, 42(3) 341
Smith, P., Expert Systems Development in Prolog and Turbo–Prolog, 41(2) 253–254
Solot, P., see R. Bonetto, 39(3) 347
Spanjers, W., see A. Dogramci, 39(2) 226
Stern, H.I., see H. Bekiroglu, 40(2) 270
Straus, A., see H. Isermann, 39(2) 226–227
Streitferdt, L., see H. Isermann, 39(2) 226–227
Telgen, J., see K.L. Hoffman, 39(2) 227–228
Thober, B., see N. Müller, 42(3) 343–344
Tind, J., see J.P. Osleeb, 40(2) 272
Tobias, A., see M. Jackson, 40(2) 270–271
Toth, P., see B. Simeone, 39(3) 348–350
Turban, E. and P.R. Watkins (eds.), Applied Expert Systems, 39(2) 225–226
Valadares Tavares, L., see M.B. Beck, 38(1) 128–129
Volgenant, A., see D. Samson, 38(1) 123
Watkins, P.R., see E. Turban, 39(2) 225–226
Weber, R., see D. Michie, 39(3) 351–352
Weglarz, J., see P. Smith, 41(2) 253–254
Wesolowsky, G.O., see R.F. Love, 38(1) 127–128
Yamakawa, T., see M.M. Gupta 43(2) 241–243
Yazdani, M. (ed.), Artificial Intelligence: Principles and Applications, 38(2) 263–264
Zimmerman, H.-J., Fuzzy Sets, Decision Making, and Expert Systems, 38(1) 125
Zimmermann, H.-J., see D. Michie, 39(3) 351–352